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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,960	01/17/2001	Magnus Hallenstal	27943-00409USP1	7006
27045	7590	11/30/2005	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			NGUYEN, STEVEN H D	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,960

Applicant(s)

HALLENSTAL ET AL.

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,17-19,21,23-25,27-33 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,17-19,21,23-25,27-33 and 37-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4-7, 17-19, 21, 23, 25, 27-33, 37-38 and 40 are rejected under 35

U.S.C. 102(b) as being anticipated by Obara (USP 5204857).

Regarding claim 1, Obara discloses an arrangement for combining narrowband and broadband transport mechanisms in a communications network, comprising a narrowband network switch including switching intelligence (Fig 1, Ref 101) and narrowband switching fabric (Fig 1, Ref 102); a broadband network switch in communication with the narrowband network switch (Fig 1, Ref 102 and 103 are coupled together), said broadband network switch including only broadband switching fabric (Fig 1, Ref 103); wherein, when a first traffic call destined for a node that has only narrowband capabilities, is received in the narrowband network switch, the switching intelligence in the narrowband network switch utilizes the narrowband switching fabric to route the first traffic call to the narrowband destination node (Fig 2, Ref 21-23, Fig 3, 4, 11 and 12 disclose a method and system for transmitting a traffic call to STM terminal via STM network), and wherein, when a second traffic call, destined for a node that has broadband capabilities, is received in the narrowband network switch, the switching intelligence in the narrowband network switch utilizes the broadband switching fabric in the broadband network switch to route the second traffic call to the broadband destination node (Fig 2, Ref 21-

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25, Fig 6, 13 and 15 disclose a method and system for transmitting a traffic call to ATM terminal via the networks).

Regarding claim 2, Obara discloses when a third traffic call, destined for a node that has broadband capabilities, is received in the broadband network switch, the broadband network switch utilizes the broadband switching fabric to route the third traffic call to the destination (Fig 2, Ref 21, 25 and 28 and Figs 7-10).

Regarding claim 4, Obara discloses wherein said broadband network switch on the switching intelligence of said narrowband network switch (Fig 1, Ref 103 must depend on Ref 101 of 102).

Regarding claim 5, Obara discloses said narrowband network switch includes a synchronous transfer mode (STM) switch (Fig 1, Ref 102), and said broadband network switch includes an asynchronous transfer mode (ATM) switch (Fig 1, Ref 103).

Regarding claim 6, Obara discloses comprising at least one circuit emulator (Fig 1, Ref 161 for emulating STM signal to ATM signal), said at least one circuit emulator adapted to enable said broadband network switch to emulate a circuit with respect to said narrowband network switch.

Regarding claim 7, Obara discloses said broadband network switch is adapted to emulate a circuit connection for the outgoing side of the second traffic call at said broadband network switch (Fig 1, Ref 161 is located at the broadband switch 103).

Regarding claim 17, Obara discloses a method for enabling a migration of a narrowband network to a broadband transport mechanism, comprising the steps of receiving, at a first network switch having call control functionality and connection control functionality (Fig 2, Ref

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20 and Fig 1, Ref 102 and 101 are a first network switch), a first traffic call in a first format (Fig 1, Ref 20, the traffic call in TDM format); determining by call control functionality in the first network switch whether the first format is a narrowband format or a broadband format (Fig 2 is used to determine if the format is narrowband STM or broadband ATM); upon determining that the first format is a narrowband format, forwarding the first traffic call to a first destination node using the narrowband connection control functionality in the first network switch (Fig 1, Ref 102 and 101 used to forward the traffic call, Fig 3-4); upon determining that the first format is a broadband format routing the first traffic call to the second network switch and forwarding the first traffic call to a second destination node using the broadband connection control functionality in the second network switch (Fig 5-6 use Ref 103 for establishing a connection across broadband network and col. 8, lines 63 to col. 10, lines 5).

Regarding claim 18, Obara discloses a first format is TDM and a second format is ATM (Fig 1 discloses Ref 102 having format TDM and Ref 103 having ATM format).

Regarding claim 19, Obara discloses the first network switch includes STM switch which directly coupled to the second network switch having ATM switch (Fig 1, Ref 102 which is STM switch directly coupled to ATM switch includes Ref 161).

Regarding claim 21, Obara discloses receiving, at the second network switch, a second traffic call in the second format (Fig 1, ref 411 and 103 for receiving a traffic call having ATM format from Ref 431); routing the second traffic call from the second network switch (Fig 1, Ref 103) to the first network switch (Fig 1, Ref 102) ; providing a telecommunication service for the second traffic call by the call control functionality in the first network switch and routing the second traffic call from the first network switch back to the second network switch (Figs 5 and 7

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discloses a method and system for routing a traffic call from broadband switch 103 to narrowband switch 102 and back in order to provide telecommunication service by using call control 101 of Fig 1).

Regarding claim 23, Obara discloses a method for enabling a migration of a narrowband network to a broadband transport mechanism, comprising the steps of receiving, at a narrowband network switch having call control functionality and connection control functionality (Fig 1, Ref 101 and 102), a first traffic call in a first format (Fig 2, ref 20 and 22); forwarding, from the narrowband network switch to a narrowband destination node (Fig 2, Ref 23 for forward a traffic call to Ref 131 in TDM format), the first traffic call in the first format; receiving, at a broadband network switch having connection control functionality (Fig 1, Ref 103), a second traffic call in a second format (Fig 2, ref 20, 24 for routing the traffic call based ATM format); routing, by the broadband network switch, the second traffic call to the narrowband network switch (Fig 2, ref 25); and forwarding, from the narrowband network switch, the second communication in the first format (Fig 2, Ref 25 for forwarding the traffic call to traffic call to STM terminal 131 in TDM format).

Regarding claim 25, Obara discloses a method for enabling a gradual migration from a primarily narrowband network to a primarily broadband network, comprising the steps of receiving in a narrowband network switch (Fig 1, Ref 102) a traffic call having an identifier that corresponds to a destination terminal of the traffic call (Fig 2, Ref 20); analyzing by the switching intelligence (Fig 1, Ref 101) in the narrowband network switch (Fig 1, Ref 102) and the identifier that corresponds to the destination terminal of the traffic call (Fig 3, Ref 501 to whether the identifier is associated with a network node having broadband capability (Fig 5, ref

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601); and if the identifier is associated with a network node having broadband capability forwarding by the switching intelligence in the narrowband network switch the communication over a broadband transport mechanism (Fig 5, ref 609 used to forwarding the call from the narrowband switch to broadband switch) and if the identifier is not associated with a network node having broadband capability, forwarding the switching intelligence in the narrowband network switch the traffic call over narrowband transport mechanism (Fig 3, ref 502 and 506-507, if the call is destination for a narrowband node then the call is forward via the narrowband switch 101).

Regarding claim 27, Obara discloses receiving a traffic call having identifier that corresponds to a destination terminal of the traffic call comprises the step of receiving the traffic call on a broadband transport mechanism (Fig 5, Ref 607 for receiving traffic call on ATM network, Fig 2, ref 20, Figs 5 and 7).

Regarding claim 28, Obara discloses said step of receiving a traffic call having an identifier that corresponds to a destination terminal of the traffic call comprises the step of receiving the traffic call on a narrowband transport mechanism (Fig 1, ref 20 for receiving a traffic call on STM network).

Regarding claim 29, Obara discloses the identifier comprises a called directory number, and wherein said step of analyzing the identifier that corresponds to the destination terminal of the traffic call comprises the step of analyzing the identifier the switching intelligence in the narrowband network switch (Fig 2, ref 23, 25, 27 and 28).

Regarding claim 30, Obara discloses said step of determining whether the identifier is associated with a network node having broadband capability comprises the step of comparing the

identifier to a plurality of entries in a data structure (Fig 2, ref 23, 25, 27 and 28 inherently disclose this feature for identifying the terminal based on its identifier).

Regarding claim 31, Obara discloses the data structure includes bearer type information (STM network includes B channel, Fig 1).

Regarding claim 32, Obara discloses step of determining whether the identifier is associated with a network node having broadband capability comprises the step of determining proximity between the network node and the destination terminal (it is inherently discloses in fig 1 for using terminal identifier for locating the ATM switch that closest to the destination node).

Regarding claim 33, Obara discloses comprising the step of determining whether an identifier that corresponds to an origination terminal associated with a network node that has broadband capability (Fig 1 and Fig 2, Ref 24 and 25).

Regarding claim 37, Obara discloses a method for combining narrowband applications with broadband transport in a communications network, comprising terminating a time division multiplexed (TDM) inbound side of a first traffic call at a circuit switch (Fig 3 and Fig 1, ref 131 for terminating a TDM inbound traffic); determining by call control functionality in the circuit switch whether the destination for the first traffic call has only TDM communication capability (Fig 1, Ref 101 determines if destination is local TDM device); the destination for the first traffic call has only communications capability; switching the first traffic call by the circuit switch (Fig 1, Ref 131 and 102); and terminating a TDM outbound side of the first traffic can at the circuit switch (Fig 3, Fig 1, ref 131 for terminating a TDM outbound traffic); terminating a TDM inbound side of a second traffic call at the circuit switch (Figs 3-6 and Fig 1, ref 131 for terminating a TDM inbound traffic); switching the second traffic call by the circuit switch (Fig 1,

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Ref 102); determining by the call control functionality in the circuit switch whether the destination for the second traffic call has asynchronous transfer mode communication capability (Fig 1, Ref 101 for determining if the destination is ATM-terminal) and if the destination for the second traffic call has asynchronous transfer mode (ATM) communications capability; switching the second traffic call by a packet switch connected to the circuit switch (Fig 1, Ref 103); and terminating an ATM outbound side of the second traffic call at the packet switch (Fig 1, ref 431).

Regarding claim 38, Obara discloses comprising the steps of terminating an ATM inbound side of a third traffic call at the packet switch (Fig 1, Ref 161); switching the third traffic call by the packet switch (Fig 1, Ref 103); switching the third traffic call by the circuit switch (Fig 1, Ref 102); and terminating a TDM outbound side of the third traffic by the circuit switch (Fig 1, Ref 131).

Regarding claim 40, Obara discloses the steps of terminating an ATM inbound side of a third traffic call at the packet switch (Fig 1, Ref 103); switching the third traffic call by the packet switch (Fig 1, Ref 103); and terminating an ATM outbound side of the third call at the packet switch (Fig 1, Ref 103).

3. Claims 3, 24 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obara (USP 5204857) in view of Holler (WO 9828884).

Regarding claims 3, 22, 36 and 39, Obara fails to disclose providing telecommunication service for narrowband and broadband network during the traffic call but disclosing the steps of terminating an ATM inbound side of a third traffic call at the packet switch (Fig 1, Ref 103); switching the third traffic call by the packet switch (Fig 1, Ref 103); switching the third traffic call by the circuit switch (Fig 1, Ref 102); at least one of the following steps terminating an

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ATM outbound side of the third traffic call at the packet switch (Fig 1, Ref 103); and terminating a TDM outbound side of the third traffic call at the circuit switch (Fig 1, Ref 102). In the same field of endeavor, Holler discloses that value added services may be invoked while connecting a call (page 8, middle of page).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a value added services as disclosed by Holler into the network of Obara. The motivation would have been to reduce the cost of the network.

Regarding claim 24, Obara fails to disclose the claimed invention. In the same field of endeavor, Holler discloses that the nodes may send instructions concerning routing information to each other (page 8 - page 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method for exchanging routing information between the nodes as disclosed by Holler into Obara's system. The motivation would have been to provide a dynamic network in order to expand it in the future.

Response to Arguments

4. Applicant's arguments filed 9/16/05 have been fully considered but they are not persuasive.

In response to pages 10-14, the applicant states that Obara does not disclose a switching intelligence in the narrowband network switch controls both the narrowband switching fabric and the broadband switching fabric in order to determine how to route the calls based on the determined of switching intelligence. In reply, Obara discloses a call control unit 101 for

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controlling the narrowband switch and broadband switch (See col. 7, lines 57-59, col. 8, lines 33-34, col. 9, lines 35-56 and col. 31-47 etc such as Figs 2-18) wherein the call control unit determines if destination is a local or long distance node which must be routed via ATM network or destination is ATM which must be routed via ATM network as set forth in the final office action Par. 2 and 3.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shaffer (USP 6751210) discloses a method and system for determining a route for routing the call based on the destination identifier via Internet or PSTN.

Maroulis (USP 6584094) discloses a method and system for determining a route for routing the call based on the destination identifier via Internet or PSTN.

Song (USP 6389014) discloses a method and system for routing a voice call via broadband network or STM network.

Dunn (USP 6324280) discloses a method and system for determining a route for routing the call based on the destination identifier via Internet or PSTN.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after


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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
November 18, 2005